

SPECIFICATION

Please amend the Specification as follows:

Please replace the full paragraph beginning at Page 2, line 12 with the following:

By making assumptions that clock activity is at one hundred percent, the power consumption model is ~~in-accurate~~ inaccurate. When the physical ~~components~~ components are actually operating, there are ~~period~~ periods in which the clock activity may vary. Hence, the power consumption model with one hundred percent clock activity does yield an overall maximum, but does not precisely model the activity of a given macro under “real world” conditions.

Please replace the line at Page 3, line 19 with the following:

FIGURE 2 is a block diagram depicting a power table;

Please replace the full paragraph beginning at Page 6, line 14 with the following:

Also, in order for the macro 100 to function, there are a number of internal connections. The first register 106 is coupled to the first logic block 108 through an eighth communication channel 139. The first logic block 108 is coupled to the second register 112 through a ninth communication channel 142, to the third register 114 through a tenth communication channel 146, to the fourth register 116 through an eleventh communication channel 148, and to the ACT2a logic 110 through a twelfth communication channel 140. The second register 112 is coupled to the second logic block 118 through a thirteenth communication channel 156. The third register 114 is coupled to the second logic block 118 through a fourteenth communication channel 158. The fourth register 116 is coupled to the second logic block 118 through a fifteenth communication channel 160. The second logic block 118 is further coupled to the fifth register 124 through a sixteenth

communication channel 166, to the sixth register 126 through a seventeenth communication channel 164, and to the ACT3b logic 122 through an eighteenth communication channel 162. The ACT3b logic 122 is also coupled to the sixth register 126 through a nineteenth communication channel 170. Also, the ACT3a logic 120 is coupled to the fifth register 124 through a twentieth communication channel 168. The fifth register 124 is further coupled to the third logic block 128 through a twenty-first communication channel 172. The sixth register 126 is further coupled to the third logic block 128 through a twenty-second communication channel 174. The third logic block then outputs an output signal (OUTPUT) to a capacitive load 132 through a twenty-third communication channel 130.

Please replace the paragraph beginning at Page 8, line 3 with the following:

An improved method is to vary the activation of the ~~activation of the~~ clock signals to attain a more realistic model. To calculate power consumption, a formula is necessary and is as follows:

Please replace the full paragraph beginning at Page 9, line 12 with the following:

Referring to FIGURE 2 of the drawings, the reference numeral 200 generally designates a power table. The vertical axis denotes percentage of clock activity. The horizontal axis denotes the switching factor, which is a percentage of input activity that range from zero to fifty percent. From the improved power consumption model, four data ~~point~~ points are calculated: for zero percent clock activity-zero percent switching factor, zero percent clock activity-fifty percent switching factor, one hundred percent clock activity-zero percent switching factor, and one hundred percent clock activity-fifty percent switching factor. From these four data points, the remaining values of the table are linearly extrapolated.

Please replace the paragraph beginning at Page 13, line 12 with the following:

Another improved method is to vary the activation of the ~~activation of the~~ clock signals to attain a more realistic model and the power consumption for each LCB. To calculate power consumption, a formula is necessary and is as follows:

Please replace the full paragraph beginning at Page 15, line 13 with the following:

Referring to FIGURE 6 of the drawings, the reference numeral 600 depicts a flow chart of the operation of a power consumption modeler. A HDL simulation 610, the energy model data 620, the net capacitance 630, and the template file 640 that describes the amount that each LCB consumes are input into the power modeler 650. The power modeler 650 can then generate an operational model of the power consumption as the macro ~~operate~~ operates as a Power Data Output ~~[[360]]~~ 660. FIGURE 4 is an example of an operational model of the power consumption of a given macro.